



April 26, 2018

Department of Toxic Substances Control
Hazardous Waste Management Program
P.O. Box 806
Sacramento, CA 95812-0806

Attention: Barbara Lee, Director
DTSCDirectorsOffice@dtsc.ca.gov

Subject: Photovoltaic Modules (PV) - Universal Waste Management Regulations

Dear Director Lee,

The Solar Energy Industries Association (SEIA®) and the California Solar and Storage Association (CALSSA, formerly CALSEIA) appreciate the efforts of the Department of Toxic Substances Control (DTSC) to promote PV recycling in the state of California and in its efforts to develop universal waste management regulations for PV modules.

SEIA is the national driving force behind solar energy and is building a strong solar industry to power America through advocacy and education. As the national trade association in the U.S., we represent all organizations that promote, manufacture, install and support the development of solar energy. SEIA works with its 1000-member companies to champion the use of clean, affordable solar in America by expanding markets, removing market barriers, strengthening the industry and educating the public on the benefits of solar energy.

Since 1977, CALSSA has advanced the common interests of the solar industry, helping make California's solar market the most robust in the United States. Comprised of over 500 contractors, manufacturers, distributors, developers, engineers, consultants and educational organizations, CALSSA represents a diverse membership committed to growing the California solar industry, including storage and solar thermal technologies. CALSSA engages with local and state decision makers to ensure California remains a solar energy leader through good public policy and regulations that provide clarity, transparency, and certainty.

We support the DTSC's efforts to designate and manage waste PV modules, that would otherwise be characterized as a California-only hazardous waste, as a Universal Waste; understanding that not all waste PV modules are characterized as a California-only hazardous waste. Both our organizations support the on-going development of practical PV module regulations. We encourage the DTSC to develop solutions that continue to encourage solar and related stakeholder companies to act positively. Our industry has come to the table proactively to manage the currently low levels of waste so that we can create a responsible environment for the future. We encourage California to continue its work in setting up a model for the rest of the country as it is



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known to do overall with solar and renewable energy technology, investment, policy and jobs growth.

We believe that this work will encourage the innovation of PV-specific recycling processes throughout the waste management industry. We currently work actively with and look forward to working with more recycling providers to improve their current processes and to develop practical and effective waste handling and treatment solutions based upon solar's unique technologies and equipment. We highly encourage the DTSC to create requirements that result in processes that recyclers can use as soon as possible and can build upon for the future.

We will continue to proactively contribute to the DTSC's development process so that the appropriate understanding of PV module material composition is considered. We envision pragmatic approaches to logistics including how modules are addressed in definitions and how modules will be handled during collection and treatment.

California's Senate Bill 489, authored by Senator Monning was enacted back on October 1, 2015 to authorize the Department to adopt regulations making end-of-life photovoltaic modules identified as California-only hazardous waste designated as a universal waste and to subject those designated modules for universal waste management. Our organizations supported this Bill and its spirit and intent for industry to actively and responsibly manage its waste at end-of-life.

Since the passage of the bill, the DTSC has since made incremental progress in the development of regulations. We have attended and actively participated in the only two public workshops - one in July 2016 and the other in August 2017. At these workshops, Department staff considered and solicited public comment on the original draft regulations from prior to SB 489 and then again for a new draft completed in August 2017. Our organizations had provided comments on the original language (pre-2016) and the newest draft from August 2017. We appreciated the consideration given to our comments and the inclusion of our recommendations in the last draft. We are currently awaiting the newest draft to understand what has also been incorporated into that document.

We have heard from DTSC staff that publication of the notice of proposed rulemaking will happen around April 26, 2018. We believe that after this current almost two-year process, there has been sufficient time and collaboration with stakeholders and industry to continue with that expected date of release of the 45-day language.

Without specific PV recycling process language in California, many of our members as well as other solar companies are hindered from responsibly disposing of non-working or damaged waste PV modules. Similarly, recycling service providers are prevented from testing waste PV modules through their processes and equipment to adequately prepare for and improve recycling activity. Those entities who are responsible for decommissioning projects and removing damaged systems have very few options to responsibly recycle the waste PV modules and have been exporting California's solar waste.

We urge you to prioritize the PV recycling regulations so that the April 26, 2018 date can be met without further delay. SEIA staff field questions regularly from constituents in California who want to properly dispose of waste PV modules and would like flexible, locally sourced option to do so. To do that, we strongly urge the DTSC to continue with its intended release of 45-day language this month so that the process can be completed in 2018.



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We look forward to actively working with the DTSC to complete this process and implement the practical, flexible and responsible requirements for our industry.

Sincerely,

/s/

Evelyn M. Butler
Sr. Director, Codes & Standards
Solar Energy Industries Association (SEIA)
ebutler@seia.org
+1-202-681-4156

/s/

Rick Umoff
Regulatory Counsel, California Director, State
Affairs
Solar Energy Industries Association (SEIA)
rumoff@seia.org
+1-202-556-2877

/s/

Kelly Knutsen, Ph.D.
Director of Technology Advancement
California Solar & Storage Association
(CALSSA)
Kelly@calssa.org
510-548-2312

Cc: Rizgar Ghazi, Hazardous Waste
Management, Acting Deputy Director
Valetti Lang, Supervisor, Hazardous
Waste Management